Issued June 4, 1909.

United States Department of Agriculture,

FOREST SERVICE—Circular 165.

(Combines and supersedes Circulars 21 and 22.)

GIFFORD PINCHOT, Forester.

PRACTICAL ASSISTANCE TO OWNERS OF FOREST LAND AND TO TREE PLANTERS.

WHY THE FOREST SERVICE OFFERS ASSISTANCE.

The forest lands of the United States are owned in three separate ways: First, by the Government of the United States, to which belong the National Forests; second, by some of the States; and third, by private owners—individuals, companies, or institutions. The private forest lands exceed in area those of the States and Federal Government combined, and their preservation in a condition to produce timber and to conserve the water supply is of vast importance to the nation. The treatment which they usually receive tends to destroy their value rather than to sustain or increase it. The reason is evident. Like other private property, these lands are held for the returns they yield; and the owners have only begun to understand that it pays better, as a rule, to protect a forest, in harvesting a timber crop, than to destroy it.

The lands are of two kinds—small holdings, for the most part farmers' woodlots, and large timber tracts.

WOODLOTS.

Throughout a very large portion of the United States nearly every farm has a certain part of its area under wood, either planted, as in regions otherwise treeless, or of natural growth. The value of this wooded portion, besides affording protection from the wind, is chiefly for fuel, fencing, and railroad ties, with some building material and the wood needed for special uses about the farm. Without the woodlot the farm very often would be an unprofitable investment, because the farmer could not afford to buy the wood which now costs him very little except the labor of cutting and moving it. But in the majority of cases this part of the farm is far less useful than it might easily be made. This is true because the farmer does not study its productive capacity as he does that of his fields and pastures, and hence does not make it yield as fully as he might, with little or no additional labor, if he went about it in the right way.

TIMBER TRACTS.

Large bodies of forest land, in almost every wooded portion of this country, have come into the hands of private owners and are held for their value as sources of timber. Under the usual methods of lumbering, the harvesting of the present crop of timber on these private lands is commonly accompanied by the destruction of the trees now too small to be profitably cut. The small trees, if left unharmed, would form the basis of a future crop, often of more value than the first. It also frequently happens that the first cutting removes from the forest the more valuable species only, so that the future growth is not nearly so valuable as it would be if the species of less value were taken and if selected trees of the best varieties were left to provide seed for a future stand.

Fire so frequently follows the lumberman, in spite of his precautions, that in many places it is thought to be inevitable. Only too often, also, fire burns over the forests before they are cut, killing trees and reducing the value of the timber. In every region of the United States adequate protection against fires is urgently needed. Often a well-planned and well-executed system of fire protection is all that is required to enable a cut-over area to renew itself or to enable a forest already growing to increase greatly in value in a few years.

UNPRODUCTIVE OR WASTE LAND.

In every part of the United States are large areas of land which are producing nothing. Frequently disastrous cutting has been carried on and repeated fires have destroyed every possibility of reproduction. Many times land has been brought under cultivation and afterwards abandoned. In the Middle West windbreaks and small woodlots are needed to protect buildings and crops and furnish posts and wood for repairs about the farms. Where trees will not grow naturally and the land is not more valuable for other purposes, trees should be planted, thus increasing the productive areas in every community and supplying nontimbered sections with necessary wood material.

NATURE OF ASSISTANCE GIVEN.

OWNERS OF TIMBERLAND.

The Forest Service offers practical assistance to private owners in devising definite plans for the proper care and management of their wooded lands, in order that the lands may be kept permanently and increasingly productive. The trained foresters of the Forest Service give advice as to what trees should be cut and what left, and also tell how the cutting can best be carried on to protect the trees which it would not now be advisable to cut. They are able to suggest markets for the less desirable kinds and to make suggestions for preventing waste in large tops, high stumps, and partly defective trees. In addition they are prepared to devise definite, practical plans that will aid in protecting private holdings from fire.

The assistance rendered is advisory, by means of correspondence or publications, or is embodied in a report based on a personal examination of the tract. If desired, the report is a practical working plan, in which details are given for proper care and management. Such a working plan includes a classification of forest land, an estimate of the merchantable timber, and a study of the young growth which is a basis for a second crop; it offers recommendations for lumbering and for the future care of the forest, and usually includes a forest map. The Forest Service does not, however, put the plan into execution except in special cases. Under no circumstance does the Forest Service make estimates of standing timber alone for the purpose of determining its sale value.

PROSPECTIVE TREE PLANTERS.

The Forest Service gives practical assistance to landowners in establishing commercial forest plantations, shelterbelts, windbreaks, and snowbreaks, and in reclaiming shifting sands and other waste lands. In connection with this work, information will be given, when possible, to interested communities by public meetings.

The purpose of the Service in its cooperation in forest planting, the plan of which has been followed continuously since July 8, 1899, is to establish in suitable localities examples of forest plantations of the highest possible usefulness and value to their owners, to afford object lessons of correct methods of forest planting, and to encourage the artificial extension of forest growth in regions where the public welfare demands a greater forest area.

The assistance rendered is advisory, by means of correspondence and publications, or is embodied in a planting plan. In regions where the Forest Service has made investigations, assistance may be given through publications giving definite recommendations of species, accompanied by an advisory letter based on the information furnished by the owner. Mimeographed sheets giving lists of dealers and range prices for plant material of species recommended will also be sent.

Since the Forest Service has made investigations of tree planting in the principal regions of artificial forest extension, advice can generally be given by the above method. Upon application for advice for tracts located in States where the Service has not already conducted regional studies, and where the results of the work will be of high educational value, a direct examination of the land may be made as soon as it is possible to undertake such work and a detailed planting plan prepared by a representative of the Forest Service.

A planting plan contains full and comprehensive instructions for the necessary forest planting upon the area examined, based upon a thorough study of its needs and possibilities. It enumerates the proper species to plant upon each particular planting site, gives instructions for the preparation of the ground and for the spacing and setting of the

young trees, shows by diagrams the arrangement of the different species when more than one is advised, and conveys information relative to procuring or producing the seed and young trees. A planting plan for a large tract or for an area possessing great variations in topography and altitude is accompanied by a sketch map of the area studied. In addition to the instructions for establishing the forest plantation, the planting plan outlines the cultural and protective measures necessary to mature a profitable forest crop. A copy of the complete planting plan, with all essential measurements, maps, and other data, is sent to the owner. The Forest Service does not furnish labor, seeds, or nursery stock needed for the execution of a planting plan, save in certain very exceptional cases and under special conditions.

REGULATIONS GOVERNING COOPERATION WITH PRIVATE OWNERS.

(*a*) In making preliminary examinations of woodlots and timber tracts the Forest Service pays the salary of the agent, while the owner pays his traveling and living expenses from and to Washington, or one of the six district headquarters west of the Mississippi River, if a special trip is necessary; or if there is an officer in the region, from the nearest point on his route and return. District headquarters are at Missoula, Mont.; Denver, Colo.; Albuquerque, N. Mex.; Ogden, Utah; San Francisco, Cal.; and Portland, Oreg.

If, as a result of the preliminary examination, the owner decides to have a working plan made, he pays the total expenses of making the plan, including salaries. Where, however, the preparation of the plan will be of unusual educational value, or if no working plans have been made in the region in question, the Forest Service may share a portion of the expenses.

(*b*) Advice for forest planting can usually be given free of cost, since the necessary detailed study in the principal regions of economic planting has already been made. When, however, a field examination is necessary, as in plans for extensive commercial planting, the landowner is requested to deposit funds to cover the total cost; except that in special cases the actual cost to the owner may be materially lessened, or the work may be done for nothing, in consideration of its experimental or educational value.

The recommendations of the examining officer or the working or planting plan need not be put into execution unless satisfactory; but when a plan has been accepted the owner will be expected to enter upon its execution, and to give such reports upon the work as the Service may request of him. If deemed advisable by the Service, and if desired by the owner, a personal inspection of work carried out under the provisions of the report submitted to him will be made.

Tracts of any size, from 5 acres up, will be considered, and applications will be taken up at the earliest convenience of the Service. No

application will be considered which contemplates the care of trees planted for decorative purposes, or any phase of the work which properly belongs to landscape gardening, since such work is entirely out of the province of the Forest Service.

It is of great importance that the owner or his representative shall accompany the Service representative upon the preliminary examination, in order that the wishes of the owner may be fully known and the plan shaped to conform with them. To this end the owner will be given proper notice of the date of the examination.

In all States where a trained forester is employed the Service will cooperate with him whenever possible.

HOW TO MAKE APPLICATION.

Those who desire assistance of the Forest Service under the provisions of this circular should fill out one of the two application forms shown below—Form 704 for examination of forest lands and Form 728 for assistance in tree planting—or make application to the Forester at Washington, D. C., if in the East, or to the proper District Forester in the West, who will supply a printed blank for the purpose. This blank, after being filled out and returned by the owner, will be filed, and arrangements will be made with the owner for an examination at the earliest practicable date. Very often, however, advice furnished through correspondence and publications makes a personal examination unnecessary.

Approved:

JAMES WILSON,

Secretary of Agriculture.

WASHINGTON, D. C., *May 14, 1909.*

[Form 704]

UNITED STATES DEPARTMENT OF AGRICULTURE—FOREST SERVICE.

APPLICATION FOR EXAMINATION OF FOREST LANDS.

_____, 19__
(Date)

Name of owner _____

P. O. address _____

Location of tract _____
(Town) (County) (State)

Area of tract _____ acres.

Character of forest _____
(Species)

Condition of forest _____
(Approximate per cent mature, second growth, burned over, cut over, etc.)

_____

Wishes of owner _____
(State the nature of the improvement desired on the tract and the scheme

_____
of management for the future)

_____

Additional information _____
(State here any information that may help the agent of the Forest

_____
Service in making the examination of the tract, such as the accommodations available, the name

_____
of the person who will accompany agent, the nearest railroad station, etc.)

_____

(Signed) _____

[Form 728]

UNITED STATES DEPARTMENT OF AGRICULTURE—FOREST SERVICE.

APPLICATION FOR ASSISTANCE IN FOREST PLANTING.

_____, 19__
(Date)

Name of applicant _____

Post-office address _____

Location of tract to be planted _____
(Town) (County) (State)

Area of tract on which planting is contemplated _____ acres.

Character of land: Level _____; rolling _____; steep _____

Kind of soil: Sandy _____; loamy _____; clay _____

Does the soil contain lime? _____

Depth of surface soil: Shallow (6–12 inches) _____; medium (12–24 inches) _____; deep (24–35 inches) _____; very deep (over 36 inches) _____

Drainage: Poor _____; fair _____; good _____

Is the land under cultivation? _____ If so, for what period, and what crops have been raised? _____

What trees thrive in natural woodlots in your neighborhood? _____

_____

Object of planting: _____

When do you intend to plant? _____

Additional information: _____

_____

(Signed) _____

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